

WHAT IS CLAIMED IS:

1. An image forming apparatus, comprising:

a mainframe having an opening portion;

an electrostatic latent image carrier on which an  
5 electrostatic latent image formed to be developed with a  
developer, the electrostatic latent image carrier being  
loadable in and unloadable from the mainframe through the opening  
portion;

a transport path through which a recording medium is  
10 transported to be formed image thereon;

a first opening and closing member provided openably and  
closably on the mainframe so as to open and close the opening  
portion; and

a second opening and closing member disposed on a side  
15 opposite to the electrostatic latent image carrier with respect  
to the first opening and closing member and provided openably  
and closably on the mainframe so as to open and close the transport  
path;

wherein the first opening and closing member and the second  
20 opening and closing member are openable and closable integrally  
with each other; and

the second opening and closing member is openable and  
closable independently of the first opening and closing member.

25 2. The image forming apparatus according to claim 1, wherein

the electrostatic latent image carrier includes a plurality of electrostatic latent image that are disposed respectively for colors and vertically arranged.

5     3.     The image forming apparatus according to claim 1,  
          wherein, in a state where the second opening and closing member is opened, the first opening and closing member is openable and closable with respect to the mainframe.

10    4.     The image forming apparatus according to claim 1, further comprising: a first coupling section which couples the first opening and closing member with the second opening and closing member to enable the first opening and closing member and the second opening and closing member to be openable and closable  
15    integrally with each other; and

          a first canceling section which cancels a coupling between the first opening and closing member and the second opening and closing member by the first coupling section, thereby enabling the second opening and closing member to be openable  
20    and closable independently of the first opening and closing member.

          5.     The image forming apparatus according to claim 1, further comprising: a first holding section which holds a closed state  
25    of the first opening and closing member;

wherein the first holding section cancels the closed state when a force that is equal to or larger than a first predetermined value is applied to the first opening and closing member in an opening direction.

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6. The image forming apparatus according to claim 5, wherein the first holding section includes:

a first engaged member which is disposed on one of the mainframe and the first opening and closing member,

10 a first engaging member which is disposed on the other of the mainframe and the first opening and closing member and which is engaged with the first engaged member, when the first opening and closing member is in the closed state, and

15 a first urging section which urges the first engaging member in a direction along which the first engaging member is to be engaged with the first engaged member; and

20 the first urging section is configured to cancel the engagement between the first engaged member and the first engaging member, when a force that is equal to or larger than the first predetermined value is applied to the first opening and closing member in the opening direction.

25 7. The image forming apparatus according to claim 5, further

comprising: a second holding section which holds a closed state of the second opening and closing member;

wherein the second holding section is configured to cancel the closed state when a coupling between the first opening and closing member and the second opening and closing member is canceled by the first canceling section, and when a force that is equal to or larger than a second predetermined value is applied to the second opening and closing member in an opening direction, the second predetermined value being smaller than the first predetermined value.

8. The image forming apparatus according to claim 5, wherein the second holding section includes:

a second engaged member disposed on one of the first opening and closing member and the second opening and closing member,

a second engaging member which is disposed on the other of the first opening and closing member and the second opening and closing member, and which is engaged with the second engaged member when the second opening and closing member is in the closed state, and

a second urging section which urges the second engaging member in a direction along which the second engaging member is to be engaged with the second engaged member; and

the second urging section is configured to cancel the engagement between the second engaged member and the second engaging member, when the coupling between the first opening and closing member and the second opening and closing member is canceled by the first canceling section and when a force which is equal to or larger than the second predetermined value is applied to the second opening and closing member in the opening direction.

9. The image forming apparatus according to claim 4, wherein the second opening and closing member includes a cover member for the mainframe, having an operating portion used for operating the first canceling section;

the first canceling section is caused by conducting a first operation on the operating portion to cancel the coupling between the first opening and closing member and the second opening and closing member, thereby setting the second opening and closing member from the closed state to the opened state independent of the first opening and closing member; and

the first opening and closing member and the second opening and closing member are caused by conducting a second operation on the operating portion to be integrally set from the closed state to the opened state.

10. The image forming apparatus according to claim 1, further

comprising:

an inverting section which inverts the recording medium to change an image-forming face to form images on both faces of the recording medium;

5 a recording medium transferring section which is opposed to the electrostatic latent image carrier, and which transfers developer image formed on the electrostatic latent image carrier to the recording medium; and

an inversion and transport path for the recording medium;

10 wherein the first opening and closing member supports the recording medium transferring section, and opens the opening portion and the transport path between the electrostatic latent image carrier and the recording medium transferring section in an opening state; and

15 the second opening and closing member is a cover member for the mainframe, which opens the inversion and transport path in an opened state.

11. The image forming apparatus according to claim 1, further  
20 comprising:

an intermediate transfer member which is opposed to the electrostatic latent image carrier;

an intermediate transferring section which transfers developer image formed on the electrostatic latent image carrier  
25 to the intermediate transfer member; and

a recording medium transferring section which transfers the developer image on the intermediate transfer member to the recording medium;

wherein the first opening and closing member supports  
5 the intermediate transfer member and the intermediate transferring section and opens the opening portion in an opened state; and

the second opening and closing member includes a cover member for the mainframe, which supports the recording medium  
10 transferring section and which opens the transport path between the intermediate transfer member and the recording medium transferring section in an opened state.

12. The image forming apparatus according to claim 1, further  
15 comprising:

an intermediate transfer member which is supported by the first opening and closing member and which is opposed to the electrostatic latent image carrier;

an intermediate transferring section which is supported  
20 by the first opening and closing member and which transfers developer image formed on the electrostatic latent image carrier to the intermediate transfer member;

a recording medium transferring section which is supported by the second opening and closing member and which  
25 transfers the developer image on the intermediate transfer

member to the recording medium;

an inverting section which inverts the recording medium to change an image-forming face to form images on both faces of the recording medium; and

5 a third opening and closing member which is placed on a side opposite to the first opening and closing member with respect to the second opening and closing member, which is disposed openably and closably on the mainframe, and an opened state of which opens an inversion and transport path;

10 wherein the first opening and closing member, the second opening and closing member, and the third opening and closing member are openable and closable integrally with each other; and

the third opening and closing member is openable and  
15 closable independently of the first opening and closing member and the second opening and closing member.

13. The image forming apparatus according to claim 12, further comprising:

20 a second coupling section which couples the second opening and closing member with the third opening and closing member to enable the second opening and closing member and the third opening and closing member to be openable and closable integrally with each other; and

25 a second canceling section which cancels the coupling



between the second opening and closing member and the third opening and closing member by the second coupling section, thereby enabling the third opening and closing member to be openable and closable independently of the first opening and closing member and the second opening and closing member.

14. The image forming apparatus according to claim 12, further comprising:

a third holding section which holds a closed state of the third opening and closing member;

wherein the third holding section is configured to cancel the closed state when the coupling between the second opening and closing member and the third opening and closing member is canceled by the second canceling section and when a force which is equal to or larger than a third predetermined value is applied to the third opening and closing member in an opening direction, the third predetermined value being smaller than second predetermined value.

15. The image forming apparatus according to claim 14, wherein the third holding section includes:

a third engaged member which is disposed on one of the second opening and closing member and the third opening and closing member,

a third engaging member which is disposed on the

other of the second opening and closing member and the third opening and closing member, and which is engaged with the third engaged member when the third opening and closing member is in the closed state, and

5           a third urging section which urges the third engaging member in a direction along which the third engaging member is to be engaged with the third engaged member; and

10           the third urging section is configured to cancel the engagement between the third engaged member and the third engaging member, when the coupling between the second opening and closing member and the third opening and closing member is canceled by the second canceling section and when a force which is equal to or larger than the third predetermined value  
15   is applied to the third opening and closing member in the opening direction.

16.   The image forming apparatus according to claim 13,

20           wherein the third opening and closing member includes a cover member for the mainframe, having an operating portion used for operating the first canceling section and the second canceling section;

          the second canceling section is caused by conducting a third operation on the operating portion to cancel the coupling  
25   between the second opening and closing member and the third

opening and closing member, thereby setting the third opening and closing member from a closed state to an opened state independent of the first opening and closing member;

the second canceling section is caused by conducting a  
5 fourth operation on the operating portion to cancel the coupling between the first opening and closing member and the second opening and closing member, thereby integrally setting the second opening and closing member and the third opening and closing member from the closed state to the opened state  
10 independent of the first opening and closing member; and

the first opening and closing member, the second opening and closing member, and the third opening and closing member are caused by conducting a fifth operation on the operating portion to be integrally set from the closed state to the opened  
15 state.

17. The image forming apparatus according to claim 1, further comprising:

a sheet feeding cassette which is placed in a level lower  
20 than the electrostatic latent image carrier, and which accommodates recording media; and

a fixing section which is placed in a level higher than the electrostatic latent image carrier, and which fixes a developer image transferred onto the recording medium.

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18. The image forming apparatus according to claim 17, further comprising: a sheet discharging tray which accommodates recording media to each of which the developer image is fixed by the fixing section;

5 wherein the sheet feeding cassette, the electrostatic latent image carrier, and the sheet discharging tray are placed in a vertically stacked manner.

19. An image forming apparatus, comprising:

10 a mainframe having an opening portion;

an electrostatic latent image carrier loadable in and unloadable from the mainframe through the opening portion;

15 a first opening and closing member provided rotatably on the mainframe and disposed exterior to the electrostatic latent image carrier so as to open and close the opening portion;

a transport path through which a recording medium is transported, the transport path disposed exterior to the first opening and closing member;

20 a second opening and closing member provided rotatably on the mainframe and disposed exterior to the transport path so as to cover and uncover the transport path; and

a coupling member that couples the first opening and closing member with the second opening and closing member so that the first opening and closing member and the second opening  
25 and closing member are rotatable integrally.